IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of the claims in the application:

1. (Currently amended) A method for determining movements of an articulated figure for use in computer-generated animation, the method comprising:

accessing a pose sequence *Q(t)*, wherein *Q(t)* comprises position values associated with segments of an articulated figure at sequential times of the pose sequence;

calculating an inverse-dynamics solution *F(t)*, wherein *F(t)* comprises calculated torque values for the segments during sequential forward-looking intervals Δt, such as would result in movements of the articulated figure corresponding to *Q(t)*;

accessing force data *G(t)*, wherein *G(t)* comprises time-varying external force values for simulating a response of the articulated figure;

simulating a dynamic response of the articulated figure in reaction to a sum of *F(t)* and G(t), thereby defining a simulated pose sequence *P(t);* and

providing the simulated pose sequence *P(t)* to a computer for use in animating an articulated figure.

2. (Original) The method of Claim 1, further comprising setting Δt equal to a user-determinable value, prior to the calculating step.

3. (Original) The method of Claim 1, further comprising scaling *F(t)* by a scale factor *s*, whereby the simulating step defines *P(t)* by a simulated dynamic response of the articulated figure in reaction to a sum of *F(t)* scaled by *s* and G(t).

4. (Original) The method of Claim 3, further comprising receiving user input defining a value of *s*, prior to the scaling step.

5. (Original) The method of Claim 3, wherein the scaling step further comprises scaling F(t) by *s*, wherein *s* is less than one.

6. (Original) The method of Claim 3, wherein the scaling step further comprises scaling *F(t)* by *s*, wherein *s* is greater than one.

7. (Original) The method of Claim 3, wherein the scaling step further comprises scaling *F(t)* by *s*, wherein *s* comprises a time-dependent function.

8. (Original) The method of Claim 1, further comprising calculating *G(t)* using *P(t)* as input to determine collision events between the articulated figure and other simulated objects, whereby impulse values for *G(t)* are determined.

9. (Currently amended) The method of Claim 1, wherein the calculating step and the simulating step are performed ~~concurrently~~ contemporaneously.

10. (Original) The method of Claim 1, wherein the simulating step is performed after the calculating step has completed by defining *F(t)* over an animation sequence.

11. (Currently amended) A computer-readable media encoded with instructions for determining movements of an articulated figure for use in computer-generated animation, the instructions comprising:

accessing a pose sequence *Q(t)*, wherein *Q(t)* comprises position values associated with segments of an articulated figure at sequential times of the pose sequence;

calculating an inverse-dynamics solution *F(t)*, wherein *F(t)* comprises calculated torque values for the segments during sequential forward-looking intervals Δt, such as would result in movements of the articulated figure corresponding to Q(t);

accessing force data *G(t)*, wherein *G(t)* comprises time-varying external force values for simulating a response of the articulated figure; and

providing a sum of *F(t)* and *G(t)* suitable for input in simulating a dynamic response of the articulated figure using a forward-dynamics motion simulation to determine a simulated pose sequence *P(t)*.

12. (Original) The computer-readable media of Claim 1, wherein the instructions further comprise setting Δt equal to a user-determinable value, prior to the calculating step.

13. (Original) The computer-readable media of Claim 1, wherein the instructions further comprise scaling *F(t)* by a scale factor *s*, whereby the providing step provides a sum of *F(t)* scaled by *s* and *G(t)*.

14. (Original) The computer-readable media of Claim 13, wherein the instructions further comprise receiving user input defining a value of *s*, prior to the scaling step.

15. (Original) The computer-readable media of Claim 13, wherein the instructions further comprise scaling *F(t)* by *s*, wherein *s* is less than one.

16. (Original) The computer-readable media of Claim 13, wherein the instructions further comprise scaling *F(t)* by *s*, wherein *s* is greater than one.

17. (Original) The computer-readable media of Claim 13, wherein the instructions further comprise scaling *F(t)* by *s*, wherein *s* comprises a time-dependent function.

18. (Previously presented) The computer-readable media of Claim 11, wherein the instructions further comprise calculating *G(t)* using *P(t)* as input to determine collision events between the articulated figure and other simulated objects, whereby impulse values for *G(t)* are determined.

19. (Original) The computer-readable media of Claim 11, wherein the instructions further comprise performing the simulating step after the calculating step has completed by defining *F(t)* over an animation sequence.

20. (Currently amended) The computer-readable media of Claim 11, wherein the instructions further comprise performing the calculating step and the simulating step ~~concurrently~~ contemporaneously.